

**Amendment and Response**

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Applicant(s): Vaartstra et al.

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For: DEVICE STRUCTURES INCLUDING RUTHENIUM SILICIDE DIFFUSION BARRIER LAYERS

a second electrode on the dielectric material, wherein at least one of the first and second electrode comprises a chemical vapor codeposited diffusion barrier layer formed of  $\text{RuSi}_x$ , where  $x$  is in the range of about 0.01 to about 10.

- E<sup>3</sup>
36. **(Thrice Amended)** An integrated circuit structure comprising:
- a substrate assembly including at least one active device and a silicon containing region;
- and
- an interconnect formed relative to the at least one active device and the silicon containing region, the interconnect including a chemical vapor deposited diffusion barrier layer on at least a portion of the silicon containing region, wherein the diffusion barrier layer is formed of  $\text{RuSi}_x$ , where  $x$  is in the range of about 0.01 to about 10.